POWER INVERTER

DC12V TO AC230V 50HZ 500 Watt
Installation Manual
And
Operating Instructions

Dear Customer

Congratulations.Your new SRX-PI500W Power Inverter is one of the most advanced and affordable DC to AC inverters available on the market today. This inverter, when used as described, will give you years of dependable service in your car, RV, boat or house.

We have taken numerous measures in quality control and in our manufacturing process to ensure that your product arrives in top condition, and that it will perform to your satisfication. In the rare event that your Power Inverter contains a damaged or missing item, does not perform as specified, or requires warranty service, do not return your Power Inverter to the store. Our technical service representative will expedite delivery of your part. If your product needs warranty service, our technical service representitive will help you obtain the fastest remedy possible under the warranty. Since it is impractical to publicize changes in every product. We reserve the right to make such changes without notice or obligation.

INTRODUCTION

To get the most of your SRX-PI500W, proper installation is critical. Please read the installation and operating instructions in this manual carefully before installing and using your SRX-PI500W. Pay special attention to the CAUTION: statements in this manual. CAUTION:Statements identify conditions or practices which could result in damage to your SRX-PI500W or to other equipment.

INSTALLATION

The power source must provide between 11 and 15 volts DC and must be able to supply sufficient current to operate the load. As a rough guide line, divide the power consumption of the load (in watts) by 10 to obtain the current (in amperes) the power source must be deliver.

Example: Load is rated at 500 watts. Power source must be able to deliver:500 divided by 10=50 amperes.

CAUTION: The SRX-PI500W must be connected only to batteries with a normal output voltage of 12 volts. The SRX-PI500W will not operate from a 6 volts battery and will be damaged if it is connected to a 24 volts battery.

PLACEMENT OF THE INVERTER

For best operating result, the inverter should be placed on a flat surface, such as the floor or a seat of the vehicle. Approximately 30’’ of cord have been provided for this purpose. The inverter should only be used in locations that meet the following requirements:

A.) DRY - Keep away from water. Do not allow water to drip or splash on the inverter.

B.) COOL - Amboent air temperature should be between 50 degrees and 80 degrees F. Do not place the inverter on or near a heating vent or any piece of equipment which is generating heat above room temperature.Do not place the inverter in direct sunlight if avoidable.

C.) VENTILATED - Allow at least one inch of clearance around the inverter for air flow. Do not place anything on or over the inverter during operation. Make sure that is allowed to circulate freely around the unit.

D.) SAFE - Do not use the inverter near flammable materials or in any location which accumulate flammable fumes or gases, such as the battery compartment of your car, truck, RV, or the kitchen.

This product is not suitable for use while traveling.

E.) CONNECTING TO THE POWER SOURCE

Your SRX-PI500W comes equipped with a pair of alligatorclips for connection to the power source.On the alligator clip, one clip is positive and the other is negative.(See Fig.1 and Fig.2)

CAUTION:DO NOT USE WITH POSITIVE GROUND ELECTRICAL SYSTEMS

CAUTION:MAKE SURE THE SRX-PI500W IS OFF

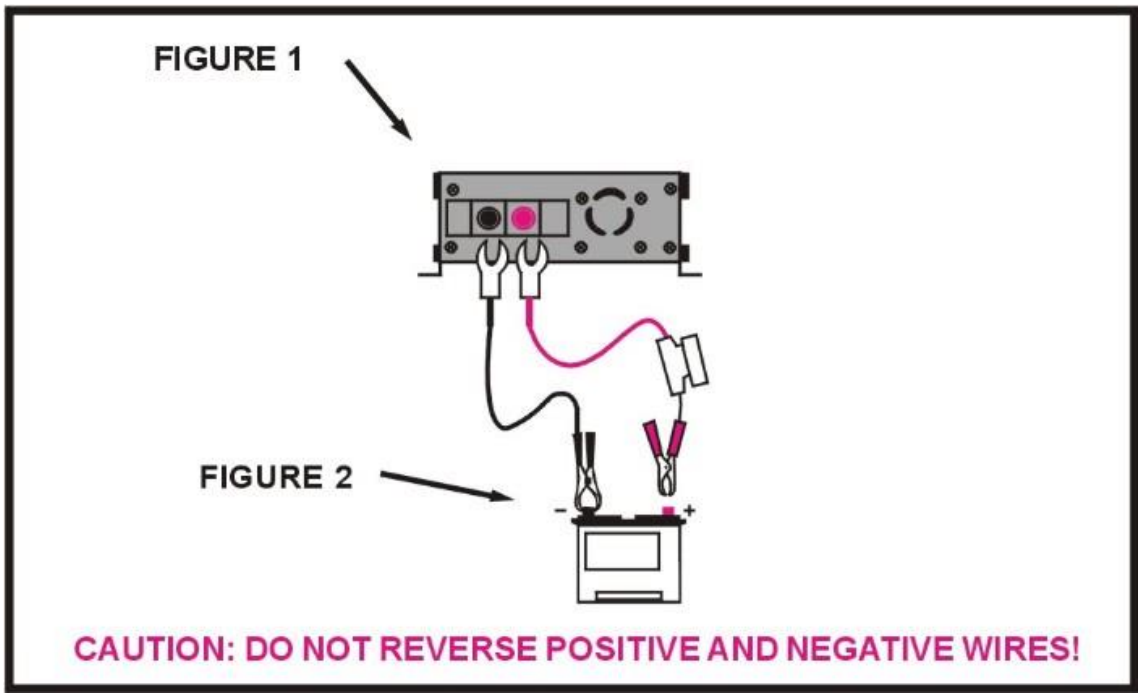


FIGURE 1

Loosen the caps on the terminals and slide the lugs between the cap and the abse.

Tighten.

FIGURE 2

Open the alligator clips and close them over the appropriate terminals or connector.

Connect the RED ALLIGATOR CLIP TO THE(+)POSITIVE TERMINAL and the BLACK ALLIGATOR CLIP TO THE (-)NEGATIVE TERMINAL.

RATED VERSUS ACTUAL USE OF QUIPMENT

Most electrical tools, appliances and audio/vedio equipment have a label indicating power consumption in amps or watts. Add up the power consumption in those items you will be using simultaneoudly, keeping total below 500 watts. If the power consumption is rated in amps, multiply by the AC volts (230) to determine the wattage. For example, a television rated at 0.9amps will use 207 watts, well within the limits of what the SRX-PI500W can handle on a continuous basis. For more information regarding the typical wattage draws of many appliances, please refer to the lable on the back of this manual.

Resistive loads, such as incandescent light, are the easiest for the inverter to drive, though larger resistive loads, such as electric atoves or heaters, require more power than the SRX-PI500W can deliver continuously. Inductive loads, such as TV's and stereos (any device with a coil or a transformer in it) require more current to operate than a resistive load of the same power rating. Induction motors (motors without brushes), as well as some televisions, may require 2 to 6 times their power rating to start up. This condition may require repeated "ON/OFF,ON/OFF,ON/OFF"switching of the power switch on your SRX-PI500W in order to get them started. The most demanding are those start under load, i.e.

compressors and pumps. Since motor and television characteristics vary widely, only experimentation will determine if a specific load can be start and how long it can be run.

IMPORTANT NOTE: The SRX-PI500W will not operate most appliances designed to produce heat, such as hair dryers, coffee makers, irons, heaters and toasters. The current use of most of these exceeds 1000 watts, far beyond the capacity of this unit. Turned either while engine is running or turned off. However, the inverter may not operate while the engine is atarting, since the battery voltage can drop substantially during cranking. The SRX-PI500W draws less than 0.4 ampere from the battery when it is not supplying power to the load. In most cases, the SRX-PI500W may be left connected to the battery when it is not in use, since it draws so little current. If the vehicle will not be used for severals days, disconnect the inverter from the battery.

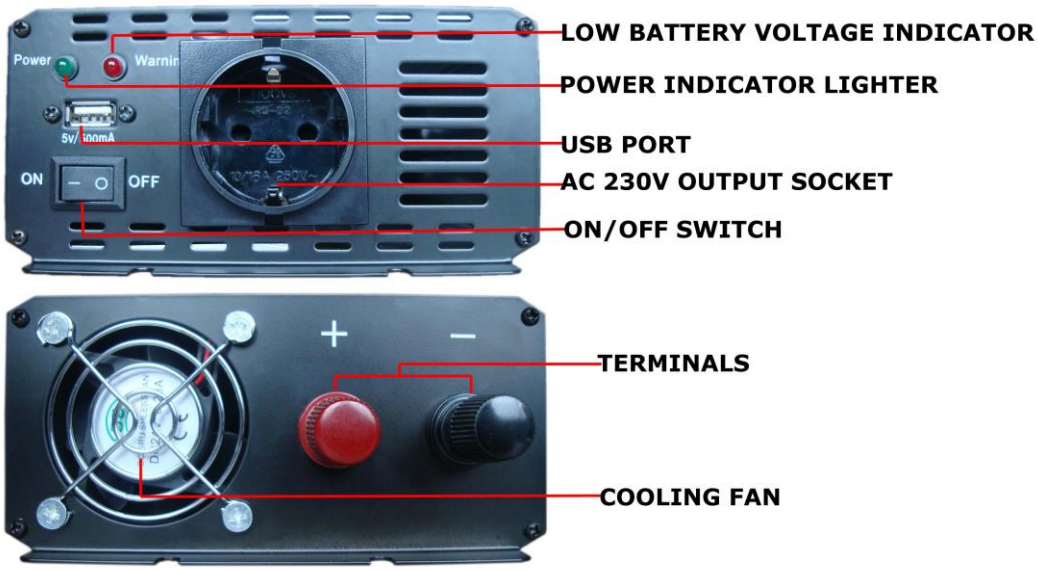
LOW BATTERY ALARM

An alarm will sound when the voltage of the battery drops to 10.5 volts. This indicates that the battery requires charging. The user should stop operations at this time, since the inverter will shut down automatically when battery voltage drops to 10.0 volts.

If the low battery alarm sounds when the battery is fully charged, followthe steps for correcting the lack of output power in the Trouble Shooting Guide. The alarm will sound when the inverter is overloaded, or if there is an excessive voltage drop between the battery and the inverter.

NOTE: The alarm may sound momentarily when the unit is being connected to, or disconnected from, the power source. This is normal and doed not indicate any problem.

INDICATORS AND CONTROLS



BATTERY OPERATING TIME

The typical vehicle battery has a minimum operating time of 1 to 2 hours, depending on the current use of the load being driven. We recommend that the operator start the vehicle every hour to recharge the battery system. This will prevent unexpected shut downs of equipment and will ensure that there is always sufficient battery capacity to start the engine.

Your SRX-PI500W circuitry constantly monitors the following hazardous conditions:

A.) Low Battery Voltage - This condition is not harmful to the inverter, but could damage the power source. An audible alarm is sounded when input voltage drops to 10.5 volts. The inverter shuts down when input voltage drops to 10.0 volts. When the condition is corrected, the unit may be restarted.

B.) Short Circuit - Reverse polarity or short circuit condition of the load will usually result in operating of the short circuit protection. Immediately disconnect the shorted load, and contact Travel Power / Roadmaster for instructions.

C.) High Temperature - When the temperature of the internal heat sinks reaches 150 degrees F, the solid-state temperature sensor located in the SRX-PI500W will automaticallt shut down the unit. Once it is allowed to cool, it may be restarted.

PRODUCT SPECIFICATIONS

Max. Continuous Power	500Watts
Peak Power	1000Watts
Optimum Efficiency	>90%
No load Current Draw	<0.4A
Waveform	Modified Sine Wave
Input Voltage Range	10-15Volts DC
Low Battery Alarm	10.5±0.5V DC
Low Battery Shutdown	10.0±0.5V DC
Alarm and Thermal Shutdown	55±5℃
Overload Protection	Restart automatically when load is <500W
Short Circuit Protection	Inline 35 amp fuse
Weight	1.3kg
Dimensions	215*150*70mm

SAMPLE APPLICATION

The products listed were operated normally with the SRX-PI500W

HOME OFFICE:	
Toshiba Laptop Computer	80watts
APPLIANCE:	
Singer Sewing machine	9A 99 Watts
Holmes 100 Watts Worklight	100 Watts
CHARGERS:	
Ryobi 7.Volt Cordless drill	8 Watts
Makita Cordless drill	35 Watts
Motorola Cellular Phone	25 Watts
JVC Camcorder(6 Volts 1200mA)	23 Watts
POWER TOOLS:	
Black and Decker Buffer	0.7A 77 Watts
Dremel Motor Tool	0.9A 99 Watts
Stanley Glue Gun	20 Watts
Weller Solder Gun	1.2A 132 Watts
AUDIO VIDEO:	
Hitachi 13” Color TV	72 Watts
Quasar 20” TV/VCR Combo	220 Watts
GE 9” Color TV/Cassette Combo	65 Watts

Sharp Hi Fi Stereo 4/Head VCR	40 Watts
Kenwood CD Charger	60Watts

Similar products should have no different with the SRX-PI500W

Items that produce heat such as hair dryers, microwave ovens, and portable electric stoves require more power than the SRX-PI500W can supply. Those are not to be used with the SRX-PI500W.

IN THE UNLIKELY EVENT……

- You have an installation problem, or
- There are any missing parts, or
- The trouble shooting guide didn't help

You can consult an expert who can help you. We will do our best to help you. In most cases we can solve your problem over the phone.

TROUBLE SHOOTING GUIDE

PROBLEM:	POSSIBLE CAUSES:	SUGGESTED REMEDY
Unit will not operate	Inverter not adequately warmed up. Battery voltage is below 10 volts. Equipment being operated draws too much power. Inverter in thermal shut down condition. Inverter fuse is blown. Battery in poor condition. Have battery checked.	Turn inverter power switch off and on until SRX-PI500W powers your appliance. Repeat as necessary until appliance starts. Charge or replace battery. Reduce load maximum 500 watts. Inverter must cool down. Check for good ventilation. Make sure load is less than 500 watts continuous operation. Call roadmaster for instructions on how to return your unit for service. Replace battery.
Low Voltage Alarm On Continuously	Insufficient power or large voltage drop.	Check condition of alligator clips. Clean or replace as necessary.
Low output Voltage	Using average reading voltmeter. Inverter is overloaded. Input voltage below 11.0 volts.	True RMS reading meter. Reduce load to continuous 500 watts to maintain regulation. Keep input voltage above 11.0 volts to maintain regulation.
Television Interference	Snow, Picture is breaking up.	Locate the SRX-PI500W as far as possible from the television, the antenna, and the antenna cables. Adjust the orientation of the SRX-PI500W, the antenna cables, and the TV power cord to reduce

		interference. Make sure that the antenna feeding the television provides an adequate ("snow free") signal and that high quality, shielded antenna cable is used.
Buzz or Hum in Audio System is used	The power supply in the device does not adequately filter the modified sine wave produced by the SRX-PI500W.	Use a sound system that use a higher quality power supply.